CLAIMS

1. A circuit comprising:

a bipolar transistor having a base, an emitter, and a collector;

a field effect transistor having a gate, a source, and a drain;

said base of said bipolar transistor being an input of said circuit;

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said emitter of said bipolar transistor being coupled to a first reference voltage;

said collector of said bipolar transistor being coupled to said source of said field effect transistor;

said gate of said field effect transistor being coupled to a bias voltage;

said drain of said field effect transistor being coupled to a second reference voltage;

said drain of said field effect transistor being an output of said circuit.

2. The circuit of claim 1 wherein said emitter of said bipolar transistor is coupled to said first reference voltage through a first impedance circuit.

3. The circuit of claim 2 wherein said first impedance circuit comprises an inductor.

4. The circuit of claim 1 wherein said drain of said field effect transistor is coupled to said second reference voltage through a second impedance circuit.

5. The circuit of claim 4 wherein said second impedance circuit comprises an inductor and a capacitor.

6. The circuit of claim 1 wherein said bipolar transistor is an NPN SiGe HBT.

7. The circuit of claim 1 wherein said field effect transistor is an NFET.

8. The circuit of claim 1 wherein said bipolar transistor is coupled to said field effect transistor in a cascode configuration in a BiFET low noise amplifier.

9. The circuit of claim 1 wherein said first reference voltage is a ground voltage.

10. The circuit of claim 5 wherein said capacitor is coupled to said drain of said field effect transistor.

11. The circuit of claim 5 wherein said inductor couples said drain of said field effect transistor to said second reference voltage.

12. The circuit of claim 1 wherein a capacitor couples a received RF signal to said input of said circuit.

13. The circuit of claim 1 wherein said second reference voltage is Vdd.

14. A BiFET low noise amplifier comprising:

a bipolar transistor having a base, an emitter, and a collector;

a field effect transistor having a gate, a source, and a drain;

an input of said BiFET low noise amplifier being coupled to said base of said bipolar transistor;

said emitter of said bipolar transistor being coupled to a first reference voltage through a first impedance circuit;

said collector of said bipolar transistor being coupled to said source of said field effect transistor;

said gate of said field effect transistor being coupled to a bias voltage;

said drain of said field effect transistor being coupled to a second reference voltage through a second impedance circuit, and said drain of said field effect transistor being coupled to an output of said BiFET low noise amplifier.

15. The BiFET low noise amplifier of claim 14 wherein said bipolar transistor is an NPN SiGe HBT.

16. The BiFET low noise amplifier of claim 14 wherein said field effect transistor is an NFET.

17. The BiFET low noise amplifier of claim 14 wherein said first reference voltage is a ground voltage.

18. The BiFET low noise amplifier of claim 14 wherein said first impedance circuit comprises an inductor.

19. The BiFET low noise amplifier of claim 14 wherein said second impedance circuit comprises an inductor and a capacitor.

20. The BiFET low noise amplifier of claim 19 wherein said capacitor is coupled to said drain of said field effect transistor.

21. The BiFET low noise amplifier of claim 19 wherein said inductor couples said drain of said field effect transistor to said second reference voltage.

22. The BiFET low noise amplifier of claim 14 wherein a capacitor couples said drain of said field effect transistor to said output of said BiFET low noise amplifier.

23. The BiFET low noise amplifier of claim 14 wherein a capacitor couples said input of said BiFET low noise amplifier to said base of said bipolar transistor.

24. The BiFET low noise amplifier of claim 14 wherein a received RF signal at

said input of said BiFET low noise amplifier is coupled to said base of said bipolar transistor.